

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

FEB 0 4 2010

Mr. Astor Boozer
State Conservationist
Natural Resources Conservation Service
441 S. Salina Street
5<sup>th</sup> Floor, Suite 354
Syracuse, NY 13202-2450

Dear Mr. Boozer:

The Environmental Protection Agency (EPA) has reviewed the Natural Resources Conservation Service's (NRCS) Draft Supplemental Watershed Plan and Environmental Assessment (EA) for the proposed rehabilitation of Floodwater Retarding Structure No. 3 of the Conewango Creek Watershed in the Town of Ellington, Chautauqua County, New York. The project entails rehabilitation of one floodwater retarding structure to meet current design and safety criteria. The plan includes the upgrade of the structure from significant hazard classification to high hazard classification and will involve raising the height of the embankment, raising and enhancing the auxiliary spillway integrity to prevent breaching and to improve stability against erosion from flow over the spillway's control section, replacing deteriorated drain valve mechanical components, and removing sediments from the permanent pool area.

The EPA's comments on the document are as follows:

- Page 23. The EA should discuss whether periodic dredging of the reservoir will be needed to maintain the function of the retarding structure.
- Page 25. The EA states that "Rehabilitation of the dam would involve extending
  the existing outlet pipe and outside dam embankment approximately 400 feet
  downstream of their current location." All impacts from extending this pipe and
  increasing the base of the dam to the downstream area must be analyzed.
- Page 28. Sediments which have accumulated behind the dam since 1971 will be excavated. This will affect four acres of submergent/emergent (PEM) and 5 acres of scrub-shrub (PSS) plant communities. The mitigation plan, which must include a description of the existing plant communities, should be included in the EA, and provided to EPA Region 2 Wetlands Protection Team for review. By including the mitigation plan in the EA, the public and other stakeholders will be able to identify the environmental impacts more completely.
- Page 28. An area of scrub-shrub wetland extends upstream (W/NW) of the dam
  and the sediment excavation zone. The EA should discuss whether any of these
  wetlands would be affected by the 7-ft increase in spillway elevation or whether
  plant community conversions could be expected.

- Page 34. It is EPA's understanding that the NRCS utilizes special seed mixtures that contain no invasive plant seeds. EPA appreciates NRCS's work in this area. All plants and seed mixtures used for this project should be native to this area.
- The EA should discuss any changes in stream levels or rainfall within the next 50 -100 years that may be caused by climate change, and whether these changes would affect the project design, and/or lead to loss of wetland habitat.
- Consider, where appropriate, the use of alternative/green building materials, industrial recycled materials, and energy efficient products. Materials such as plastic lumber, porous concrete, cinder gravel, modular blocks, and crushed granite are widely available and their use should be considered. (See enclosure for additional information.)

EPA appreciates the opportunity to comment on this draft EA. If you have any questions, please call Lingard Knutson of my staff at (212) 637-3747.

Sincerely, yours

Grace Musumeci, Chief

**Environmental Review Section** 

Grace Musumer

Enclosure

# U.S. EPA Region 2 Green Recommendations<sup>1</sup>

#### Recommendations:

To the maximum extent possible, projects are encouraged to use local and/or recycled materials; to recycle materials generated onsite; and to utilize low emissions technology and fuels. Further, they should use, to the extent feasible, renewable energy (including, but not limited to solar, wind, geothermal, biogas, and biomass) and energy efficient technology in the design, construction, and operation of transportation, building, and infrastructure projects.

#### • ENERGY STAR/Multi-media green building and land design practices

Require green building practices which have multi-media benefits, including energy efficiency, water conservation, and healthy indoor air quality. Apply building rating systems and tools, such as Energy Star, Energy Star Indoor Air Package, and Water Sense for stimulus funded building construction. Third party high-bar, multimedia standards should be required for building construction and land design (LEED and Sustainable Sites Initiative, Collaborative for High Performance Schools (CHPS), or local equivalent).

http://www.usgbc.org/DisplayPage.aspx?CMSPageID=64

http://www.energystar.gov/index.cfm?c=business.bus bldgs

http://www.energystar.gov/index.cfm?c=bldrs\_lenders\_raters.nh\_iap

#### • Encourage water conservation in building construction

Promote the use of water-efficient products to be used in new building construction through the use of WaterSense-labeled products and the use of contractors certified through a WaterSense-labeled program. <a href="http://www.epa.gov/watersense/water/fed-agency.htm">http://www.epa.gov/watersense/water/fed-agency.htm</a>

#### Encourage Low Impact Development to help manage storm water

Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. <a href="http://www.epa.gov/nps/lid/">http://www.epa.gov/nps/lid/</a>

# Alternative and Renewable Energy

The Department of Energy's "Green Power Network" (GPN) provides information and markets that can be used to supply alternative generated electricity. The following link identifies several suppliers of renewable energy. <a href="http://apps3.eere.energy.gov/greenpower/buying/buying\_power.shtml?state=NJ">http://apps3.eere.energy.gov/greenpower/buying/buying\_power.shtml?state=NJ</a>

<sup>&</sup>lt;sup>1</sup> "Green" here means environmentally sound practices in general and is not equivalent to the specific "green infrastructure" requirements in the American Recovery and Reinvestment Act (ARRA). Please note that this list is not meant to be all inclusive.

#### Ensure clean diesel practices

Implement diesel controls, cleaner fuel, and cleaner construction practices for all on- and off-road equipment used for transportation, soil movement, or other construction activities, including:

- 1) Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits;
- 2) Use of ultra low sulfur diesel fuel in nonroad applications ahead of the mandate; and
- 3) Use of the cleanest engines either through add-on control technologies like diesel oxidation catalysts and particulate filters, repowers, or newer, cleaner equipment

Encourage entities to consider adopting contract specifications requiring advanced pollution controls and clean fuels. A model spec is online at (applies to both on and non-road engines):

http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf

Additional Information: http://www.epa.gov/diesel/construction/contract-lang.htm

How to guide: http://www.mass.gov/dep/air/diesel/conretro.pdf

### • Promote the use of recycled materials in highway and construction projects

Many industrial and construction byproducts are available for use in road or infrastructure construction. Use of these materials can save money and reduce environmental impact. The Recycled Materials Resource Center has developed user guidelines for many recycled materials and compiled existing national specifications. <a href="http://www.recycledmaterials.org/tools/uguidelines/index.asp">http://www.recycledmaterials.org/tools/uguidelines/standards.asp</a> <a href="http://www.recycledmaterials.org/tools/uguidelines/standards.asp">http://www.recycledmaterials.org/tools/uguidelines/standards.asp</a> <a href="http://www.epa.gov/osw/conserve/rrr/imr/index.htm">http://www.epa.gov/osw/conserve/rrr/imr/index.htm</a>

# • Encourage safe reuse and recycling of construction wastes

Promote reuse and recycling at the 50% (by weight) level for building, road, and bridge project construction and demolition debris wastes. The *Federal Green Construction Guide for Specifiers* includes a construction waste management specification. http://www.wbdg.org/design/greenspec\_msl.php?s=017419

# Encourage sustainable storm water management at building sites

Implement site planning, design, construction, and maintenance strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the building site with regard to the temperature, rate, volume, and duration of flow.

http://cfpub.epa.gov/npdes/home.cfm?program\_id=298

Consider designs for storm water management on compacted, contaminated soils in dense urban areas: <a href="http://www.epa.gov/brownfields/publications/swdp0408.pdf">http://www.epa.gov/brownfields/publications/swdp0408.pdf</a>.

#### • Encourage cost-efficient, environmentally friendly landscaping

EPA's GreenScapes program provides cost-efficient and environmentally friendly solutions for landscaping. Designed to help preserve natural resources and prevent waste and pollution, GreenScapes encourages companies, government agencies, other entities, and homeowners to make more holistic decisions regarding waste generation and disposal and the associated impacts on land, water, air, and energy use. <a href="http://www.epa.gov/osw/conserve/rrr/greenscapes/index.htm">http://www.epa.gov/osw/conserve/rrr/greenscapes/index.htm</a>

# • Incorporate onsite energy generation and energy efficient equipment upgrades into projects at drinking water and wastewater treatment facilities

Promote the use of captured biogas in combined heat and power systems and/or renewable energy (wind, solar, etc.) to generate energy for use onsite as well as upgrades to more energy efficient equipment (pumps, motors, etc.)

http://www.epa.gov/waterinfrastructure/bettermanagement\_energy.html

• Encourage land development in brownfield and infill sites

Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. These sites are often "infrastructure-ready," eliminating the need to build new roads and utility lines which are necessary in undeveloped land. <a href="http://www.epa.gov/brownfields/">http://www.epa.gov/brownfields/</a>

Use the Integrated Design process on building developments.

Current procurement practices tend to separate out development into distinct stages that discourage communication across the project lifecycle. The Integrated Design process calls for the active and continuing engagement of all stakeholders throughout the building design, development, and construction phases including the owners, architects, engineers, building department officials, and other professionals. This process can help create a higher performing building at lower costs, allows for various building systems to work together, eliminates redundancy from overdesign and unnecessary capacity, and minimizes change orders during the construction phase. We encourage revising procurement practices so that it can use the Integrated Design process. <a href="http://www.wbdg.org/design/engage\_process.php">http://www.wbdg.org/design/engage\_process.php</a>

- Encourage use of Smart Growth and transit oriented development principles
   Smart Growth and transit oriented development (TOD) principles help preserve natural lands and critical environmental areas, and protect water and air quality by encouraging developments that are walkable and located near public transit.
   <a href="http://www.epa.gov/smartgrowth">http://www.epa.gov/smartgrowth</a>
- Ensure environmentally preferable purchasing
  Promote markets for environmentally preferable products by referencing EPA's multi-attribute
  Environmentally Preferable Purchasing guidance. <a href="http://www.epa.gov/epp">http://www.epa.gov/epp</a>
- Purchase 'green' electronics, and measure their benefits

  Require the purchase of desktop computers, monitors, and laptops that are registered as Silver or Gold products with EPEAT, the Electronics Product Environmental Assessment Tool (www.epeat.net).

  Products registered with EPEAT use less energy, are easier to recycle, and can be more easily upgraded than non-registered products. Energy savings, CO<sub>2</sub> emission reductions, and other environmental benefits achieved by the purchase, use and recycling of EPEAT-registered products can be quantified

using the Electronics Environmental Benefits Calculator (http://eerc.ra.utk.edu/ccpct/eebc/eebc.html).

• Incorporate greener practices into remediation of contaminated sites

Encourage or incentivize the use of greener remediation practices, including designing treatment systems with optimum energy efficiency; use of passive energy technologies such as bioremediation and phytoremediation; use of renewable energy to meet power demands of energy-intensive treatment systems or auxiliary equipment; use of cleaner fuels, machinery, and vehicles; use of native plant species; and minimizing waste and water use. <a href="http://cluin.org/greenremediation/index.cfm">http://cluin.org/greenremediation/index.cfm</a>